

BEFORE THE TENNESSEE REGULATORY AUTHORITY AT

NASHVILLE, TENNESSEE

NOVEMBER 3, 1999

IN RE:

**PETITION TO CONVENE A
CONTESTED CASE PROCEEDING TO
ESTABLISH PERMANENT PRICES
FOR INTERCONNECTION AND
UNBUNDLED NETWORK ELEMENTS**

DOCKET NO. 97-01262

**ORDER RE PETITIONS FOR RECONSIDERATION AND
CLARIFICATION OF INTERIM ORDER ON PHASE I**

This matter came before the Tennessee Regulatory Authority (the "Authority" or the "TRA") at the regularly scheduled Authority Conference held on April 20, 1999, to make findings of fact and conclusions of law on the petitions for reconsideration and clarification of decisions in Phase I of this matter.¹ This docket (hereafter referred to as the "Permanent Prices proceeding") was convened to establish prices for interconnection and unbundled network elements ("UNEs") to replace the proxy prices previously adopted by the Authority. In Phase I of this proceeding, the Authority determined the adjustments for each cost model presented. The petitions of the parties for reconsideration and clarification are being considered as a part of Phase I. The decisions of the Authority regarding those petitions are

¹ The Authority's decisions in Phase I were reflected in *Interim Order on Phase I of Proceeding to Establish Prices for Interconnection and Unbundled Network Elements* ("Interim Order") entered on January 25, 1999. The Authority announced its Phase I decisions at an Authority Conference held on June 30, 1998.

set forth in this Order, and shall be incorporated into the Final Order in this proceeding at the time of its entry.

II. BACKGROUND

The Authority released its Interim Order on Phase I on January 25, 1999, setting forth the needed adjustments to the Total Element Long Run Incremental Cost ("TELRIC") and Hatfield cost models proposed by the parties. On February 4, 1999, BellSouth Telecommunications, Inc. ("BellSouth") filed a petition seeking reconsideration and clarification of the Authority decisions as reflected in the Interim Order. The petition specifically requested reconsideration of the following issues:

- 1) Issue 4: What are the appropriate fill factors and utilization factors?
- 2) Issue 5: What depreciation rates should be used in determining interconnection and UNE prices?
- 3) Issue 7: How should network maintenance expenses be calculated for determining UNE prices?
- 4) Issue 14: What is the proper method to calculate switch costs?
- 5) Issue 19: What approach should be adopted for calculating prices for physical collocation? What inputs, if any, should be adjusted?

BellSouth sought clarification of the following issues:

- 1) Issue 16: What is the appropriate level of Operational Support Services (OSS) costs to be included in permanent prices?
- 2) Issue 17(b): What amount of Operation Support Services (OSS) costs should be recovered in nonrecurring prices?
- 3) Issue 17(c): Which work activities should be included in developing non-recurring prices?
- 4) Issue 18: What is the appropriate level of disconnect costs to be included in the non-recurring price?

BellSouth's petition further requested either clarification or reconsideration on:

Issue 13: Is it necessary to set prices for network element combinations? Should Integrated Digital Loop Carrier (IDLC) be offered to competing carriers?

MCI WorldCom also filed a petition on February 4, 1999, seeking reconsideration of the Authority's decision regarding Issue 13: Should Integrated Digital Loop Carrier (IDLC) be offered to competing carriers? In deliberating on the above issue, the Authority, on its own motion, reconsidered Issue 12 (What is the appropriate loop sampling method for determining permanent prices?) to ensure consistency between the model inputs.

After issuance of the Authority's Notice,² responses to BellSouth's petition were filed by: MCI WorldCom, American Communications Systems, Inc. ("ACSI"), the Consumer Advocate Division of the Attorney General's Office ("Consumer Advocate"), and NextLink Tennessee, Inc. ("NextLink"). AT&T Communications of the South Central States ("AT&T") filed its response on February 19, 1999, with a revised filing on February 22, 1999. BellSouth filed its Reply on March 1, 1999.

The Interim Order in Phase I of this proceeding directed the parties to submit cost studies reflecting the findings of the Authority within thirty (30) days of the date of the Order. On February 24, 1999, BellSouth and AT&T filed such studies with the Authority. Those studies will require revisions that reflect the decisions of the Authority set forth in this Order.

III. SUMMARY OF FINDINGS BY THE AUTHORITY

In deliberating on the petitions for reconsideration and clarification on April 20, 1999, the Authority determined that the United States Supreme Court's decision in *AT&T Corp. v.*

² After BellSouth and MCI filed their petitions for reconsideration and clarification, the Authority issued a Notice on February 10, 1999, setting forth a schedule for Responses by the parties and the Replies to the Responses.

Iowa Utilities Board (hereinafter referred to as the “*Iowa Utilities decision*”)³ must be considered. In that case, the Supreme Court held that the rule of the Federal Communications Commission (“FCC”) forbidding incumbent local exchange carriers (“ILECs”) from separating “already combined elements” is consistent with the law and should be reinstated. The Supreme Court also vacated FCC Rule 51.319 entitled, “Specific Unbundling Requirements,” stating that the FCC did not “adequately consider” the “necessary” and “impair” standards of Section 252 of the Federal Telecommunications Act.⁴ FCC Rule 51.319 lists seven (7) specific UNEs that incumbents are required to provide. Following the Supreme Court decision, the FCC released a Notice of Proposed Rulemaking addressing the method for determining which network elements must be unbundled. In this Notice the FCC stated that it did not “propose to eliminate the states’ authority to impose additional unbundling requirements, pursuant to the standards and criteria we adopt in this proceeding.”⁵

This Order reflects the Authority’s reconsideration of its decisions on fill factors, network maintenance expense, OSS costs, network combinations and loop sampling weights. This Order also provides clarification to the parties on the inclusion of vertical features in switch costs, work activities in non-recurring prices and disconnect costs in non-recurring prices.

The parties have raised issues involving the combination of UNEs, specifically the provisioning of Integrated Digital Loop Carrier (“IDLC”) by BellSouth and have questioned that portion of the Authority’s decision in light of the Supreme Court’s reinstatement of FCC Rule 51.315(b). This rule prohibits an ILEC from separating requested elements which are

³ *AT&T Corp. v. Iowa Utilities Board*, ___ U.S. ___, 142 L.Ed 2d 835, 119 S. Ct. 721 (1999).

⁴ *AT&T Corp. v. Iowa Utilities Board*, ___ U.S. ___, 142 L.Ed 2d 835, 853-857, 119 S. Ct. 721, 733-736 (1999).

⁵ FCC Second Further Notice of Proposed Rulemaking, Docket 96-98, para. 14 (April 16, 1999).

currently combined. Upon reconsideration, the Authority found that BellSouth should offer IDLC to competitors and should submit cost-based rates for IDLC in its compliant cost studies.

In Phase I of this proceeding, the Authority adopted the formula presented by Dr. Marvin Kahn, witness for ACSI, for calculating fill factors. However, in reviewing the record the Authority has determined that his formula relied upon access line growth rates that do not reflect non-switched lines. Upon reconsideration, the Authority corrected the growth in access lines to include all lines in the 1996 Automatic Report Management Information System (“ARMIS”) data for BellSouth. This correction resulted in the adoption of a distribution fill of 50.2%, fiber fill of 74.0% and copper fill of 65.1% for use in the BellSouth TELRIC model. Because the loop sampling method also relies on access line counts, the Authority determined that it was necessary to revise the loop weightings consistent with data used to determine fill factors. The loop weightings reflected in the 1996 ARMIS data are 62.89% for residential and 37.11% for business. Therefore, the Authority adopted these weightings for both the BellSouth TELRIC and the Hatfield models.

The Authority’s Interim Order also required BellSouth to reduce all 1996 normalized plant specific expenses used in the TELRIC model by a 7% productivity adjustment for three (3) years at 22.5% (compounded). The record in this proceeding justifies the use of 7% productivity adjustment. However, the record only supports applying this adjustment to network operations expenses. Upon reconsideration, the Authority found that only network operations expense accounts should be reduced by 22.5% to reflect a three-year productivity adjustment.

The request for reconsideration of non-recurring Operation Support Services (“OSS”) costs is based upon the presentations that only the beneficiaries of OSS should be bound to pay for the service and that OSS benefits the ordering of all UNEs, not just loops. Upon reconsidering the OSS costs, the Authority determined that these costs should be recovered from all users of the new systems in an additive to each UNE recurring rate.

The Authority recognizes that the best interests of competition are advanced by proceeding with this docket in a careful and orderly manner to establish permanent UNE prices in Tennessee.⁶ By addressing the petitions in light of the *Iowa Utilities* decision and recent FCC notices, the parties are permitted to file cost studies reflecting the findings in this Order, thus enabling the Authority to rule on a cost model and select permanent UNE prices. In the event that the FCC adopts rules pursuant to its Rulemaking that are inconsistent with the Authority’s findings or preempt the Authority’s Orders in this proceeding, any other party may petition the Authority to revisit its findings in this proceeding.

V. FINDINGS OF FACT AND CONCLUSIONS OF LAW

The rulings in this proceeding are based on a review of the petitions before this Authority, all applicable federal and state laws, FCC Notices and Rulemakings, the Supreme Court’s *Iowa Utilities* decision, the motions, responses and the evidentiary record.

The Directors deliberated on the issues raised in the petitions during a regularly scheduled Authority Conference held on April 20, 1999. The findings and conclusions resulting from these deliberations are set forth below.

⁶ Cost-based UNE rates is one of the checklist items that must be met for a Regional Bell Operating Company (“RBOC”) to enter the interLATA long distance market.

Issue 4: What are the appropriate fill factors and utilization factors?

“Fill factor” is a term used to describe the capacity utilization rate of telephone network facilities. The Authority found in Phase I of this proceeding that “fill and utilization factors should be reasonable and should acknowledge future technology, demand, cost and engineering as testified to by Dr. Marvin Kahn for ACSI.”⁷ In Phase I, the TRA adopted a distribution fill of 54.69%, fiber feeder fill of 76.94%, and copper feeder fill of 76.94%, as recommended by ACSI, and directed that these factors be used in the BellSouth TELRIC Calculator.

Position of the Parties

BellSouth requests that the Authority reconsider its decision regarding the fill factors in Phase I. In its petition, BellSouth maintains that the factors put forth by Dr. Kahn and adopted by the Authority imply that BellSouth overbuilt its network in the past, an assumption that BellSouth asserts is not supported by the evidentiary record. BellSouth claims that future demand cannot be met with the factors adopted by the Authority and that adoption of these factors will result in virtually no spare capacity in its forward-looking network.⁸ Additionally, BellSouth asserts that the factors adopted by the Authority are based on higher utilization rates in a competitive environment (which no submitted studies support) and that the Authority’s Interim Order did not adopt the underlying analysis and supporting evidence of Dr. Kahn.⁹

MCI WorldCom maintains that the fill and utilization factors proposed by BellSouth would shift 100% of the costs of spare capacity to the customers and the competing local exchange carriers (“CLECs”). MCI WorldCom asserts that the factors adopted by the

⁷ TRA Interim Order on Phase I (January 25, 1999), p. 12

⁸ BellSouth Petition for Reconsideration and Clarification, (February 4, 1999), pp. 2-3.

⁹ BellSouth Reply Memorandum, (March 1, 1999), p. 1.

Authority do not reflect the level of spare capacity that BellSouth may place in the network, only the amount of spare capacity costs that may be recovered from CLECs. MCI WorldCom contends that the factors adopted by the Authority result in all providers of service being placed on the same level.¹⁰

ACSI maintains that the factors adopted by the Authority are supported in the evidentiary record and that those factors require BellSouth to utilize the network more efficiently. ACSI asserts that BellSouth has built its network for strategic development of broadband service facilities and that such excess capacity should not be considered when projecting the costs of offering basic local exchange service.¹¹

AT&T responded to BellSouth contending that BellSouth's petition is not based on any factual error committed by the Authority or failure of the Authority to rely upon the record. AT&T maintains that BellSouth admitted that its proposed fill factors were historical and provided no justification to support the continual use of these fill factors in a competitive environment. Additionally, AT&T asserts that the testimony of Mr. James Wells and Mr. Ernest Carter support the rationale that fill factors in the future will deviate from the fill factors in the network today.¹²

Findings

Although the position of BellSouth, as presented in its Petition, leaned toward rearguing the case, the Authority finds that reconsideration of the fill factors adopted in Phase I is warranted. In Phase I of this proceeding, the Authority adopted the fill factors proposed by ACSI witness Kahn. Upon further review, however, the Authority discovered a mathematical error and an error in the growth factor used in Dr. Kahn's fill factor calculations

¹⁰ MCI WorldCom's Response to BellSouth's Petition, (February 19, 1999), pp. 2-3.

¹¹ ACSI Response to BellSouth's Petition, (February 19, 1999), pp. 1-2.

which were not brought out in the hearing.

First, the access line growth rate used by Dr. Kahn does not include non-switched lines that support services such as high-speed data. CLECs will provision non-switched services through UNEs as well as switched services. For this reason, the Authority maintains that non-switched lines should be included in the access line growth calculation. Inclusion of non-switched lines in the growth rate is also consistent with the FCC's 706 Order. The FCC found that the pro-competitive provisions of the 1996 Federal Telecommunications Act ("1996 Act") apply equally to advanced services and to circuit-switched voice services.¹³ The FCC went on to say that all incumbent LECs must provide requesting telecommunications carriers with unbundled loops capable of transporting high-speed digital signals and must offer unbundled access to the equipment used in the provision of advanced services, subject to considerations of technical feasibility and the provisions of Section 251(d)(2).¹⁴ Because one of the primary uses of non-switched loops is the transport of high-speed digital data, it is logical to include non-switched services in the projected growth calculation.

Second, the Authority discovered a mathematical error in Dr. Kahn's calculation when averaging the economic life of aerial and buried distribution facilities. This error produced an average economic life for aerial and buried cable that exceeds the economic life of either of these accounts taken separately.

Using the formulas of Dr. Kahn, the Authority adjusted the fill factors for distribution and feeder facilities to correct the mathematical error and reflect a growth rate based on "total" access lines contained in the BellSouth ARMIS report. These adjustments result in a

¹² AT&T Response to BellSouth's Petition, (February 22, 1999), pp. 5-6.

¹³ FCC's *Memorandum Opinion and Order, and Notice of Proposed Rulemaking*, Order 98-188, (August 6, 1998), 11.

¹⁴ *Id.*

factor for distribution fill which is comparable to that proposed by BellSouth. Dr. Kahn proposed identical fill factors for copper and fiber optic feeder while BellSouth proposed a fill factor for each feeder type. Upon reconsideration, the Authority has determined that it is not reasonable to assume, as Dr. Kahn does, that technologies as diverse as copper and optical fiber can operate at the same fill. Copper cables experience a much higher defective rate over their useful service life because: (1) there is a much higher rate of workman activity in copper cables than fiber cables; (2) copper cables are more susceptible to lightning and moisture than fiber cables; and (3) copper cables will contain more defects when they are initially installed than fiber cables. For these reasons, the same fill factor should not be used for copper and fiber feeder cables. Fiber cables can be operated efficiently at higher fills than copper cables. Also, in some cases, additional capacity can be provided over fiber solely with an upgrade of the multiplexer equipment at each end of the facility. This implies a shorter reinforcement schedule for fiber cables as Dr. Kahn suggests in his feeder fill factor calculation.

Based on the foregoing reconsideration, the Authority finds that the fill factors as proposed by BellSouth are more reasonable and should be adopted for use in its TELRIC model. The factors proposed by BellSouth are 50.2% for distribution, 74.0% for fiber feeder and 65.1% for copper feeder.

Issue 12: What is the appropriate loop sampling method for determining permanent prices?

The Authority's decision relating to Issue 4 necessitates that the Authority re-visit Issue 12 in order to maintain consistency between the cost model inputs. The reconsideration of Issue 4 is based upon access line growths as reflected in Tennessee-specific 1993-1996 ARMIS data for BellSouth (the "ARMIS data"). Use of the ARMIS data ensures that all access lines are included in the growth factor when calculating fill factors.

The Authority's Interim Order directed BellSouth to use a residential loop weighting of 69.22% and business loop weighting of 30.78% in the TELRIC model. These values were suggested by Tennessee Cable Telecommunications Association ("TCTA") witness William Barta and were based on access line counts in BellSouth's Tennessee-specific 1996 Customer Record Information System ("CRIS") data. The CRIS data, however, differs from the access lines data reflected in the 1996 ARMIS report. The 1996 ARMIS data reflects a total of 2,846,289 BellSouth loops in Tennessee. Of these, 1,790,142 (62.89%) are residential loops and 1,056,147 (37.11%) are business loops.¹⁵

Findings

The use of Tennessee-specific 1996 ARMIS data for BellSouth in determining access line growth when calculating fill factors and of 1996 CRIS data for determining residential/business line weightings creates an inconsistency. To rectify this inconsistency, the Authority adopts a loop weighting of 62.89% for residential and 37.11% for business for use in the "Res/Bus Weighting Table" of the BellSouth Loop Model. Likewise, the Hatfield model should also reflect a 62.89% residential and 37.11% business input.

¹⁵ The total number of business loops assumes that all unswitched loops are for business customers.

Issue 5: What depreciation rates should be used in determining permanent prices?

During Phase I of this proceeding, the parties presented three sets of depreciation factors for use in setting UNE prices: FCC prescribed factors, Tennessee Public Service Commission ("TPSC") prescribed factors and the factors used to develop BellSouth's financial reporting rates. As reflected in its Interim Order, the Authority determined that, "BellSouth's TELRIC Calculator model and the Hatfield model should use Tennessee-specific depreciation lives, salvage values and other inputs used in calculating the depreciation rates established by the TPSC in 1993."¹⁶

Position of the Parties

BellSouth requested that the Authority reconsider its decision and adopt the depreciation rates proposed by BellSouth. In its Petition, BellSouth maintains that the depreciation rates adopted by the Authority are inconsistent with the forward-looking methodology, will result in a subsidy system and ignore the evidence in the record. In addition, BellSouth states that price-regulated companies, pursuant Tenn. Code Ann. § 65-5-209, are permitted to set their own depreciation rates. Further, the FCC is currently re-examining the depreciation rates to be used in a competitive environment. BellSouth maintains that the rates set in 1993 result in a smaller annual recovery because the lives were set artificially long. According to BellSouth, these rates do not reflect today's competitive environment where asset lives should be set shorter.¹⁷

AT&T maintains that the Authority's decision is based on the record and that BellSouth's petition is merely an effort to reargue its position. AT&T asserts that BellSouth's proposed lives were not Tennessee-specific and effectively would increase depreciation

¹⁶ TRA Interim Order Phase I (January 25, 1999), p. 13

¹⁷ BellSouth Petition for Reconsideration and Clarification, (February 4, 1999), pp. 3-6.

charges beyond that which would be permitted in a forward-looking environment. AT&T maintains that BellSouth's proposed depreciation rates would create a discriminatory advantage to BellSouth by allowing it to recover capital earlier at the CLEC's expense, thereby raising the cost to the CLECs and placing them in a non-competitive position. Further, AT&T states that notice of the FCC's inquiry into depreciation rates in a competitive environment was issued after the conclusion of the hearing in Phase I and that this is not sufficient reason to justify the Authority re-considering its decision.¹⁸

MCI WorldCom maintains that during the 1993 pre-prescription proceeding BellSouth argued that it was facing impending competition on all fronts. Therefore, the rates set by the TPSC in 1993 are reflective of competition.¹⁹

The Consumer Advocate contends that the use of the 1993 depreciation lives is consistent with the forward-looking methodology adopted in this docket because the 1993 settlement process attempted to look forward and determine the life of newly installed assets. The Consumer Advocate states that the FCC is not proposing to eliminate the current process used to set depreciation rates, as implied by BellSouth. Further, the Consumer Advocate asserts that the FCC is seeking comments on its proposal to extend the depreciation range of digital switches from 16 to 18 years to a range of 13 to 18 years.

The Consumer Advocate further contends that since the purpose of this proceeding is to determine UNE rates, Tenn. Code Ann. § 65-5-209 is inapplicable. Additionally, the Authority is responsible for Tennessee rates, not rates in other states, and therefore, it is appropriate to adopt lives, salvage values and other inputs specific to Tennessee.²⁰

¹⁸ AT&T Response to BellSouth Petition, (February 22, 1999), pp. 8-10.

¹⁹ MCI WorldCom Response to BellSouth Petition, (February 19, 1999), p. 4.

²⁰ Consumer Advocate's Response to BellSouth Petition, (February 19, 1999), pp. 3-8.

Findings

The FCC issued a Notice of Proposed Rulemaking (“NPRM”) to address depreciation in which it concluded that, with the exception for the digital switching account, there is no evidence indicating that the current ranges are either too long or too short.²¹ Additionally, the FCC believes that as soon as thriving competition exists, its depreciation process should be eliminated. Notwithstanding the FCC’s NPRM, the FCC has not determined that its prescribed rates or processes are inappropriate in today’s environment. The FCC’s NPRM does not imply that the FCC has found systemic problems regarding its depreciation process. Further, it should be noted that the 1993 TPSC prescribed life of 17 years for digital switching is within the currently authorized FCC range of 16 to 18 years and within the proposed FCC range of 13 to 18 years, while BellSouth’s proposed life of 10 years is outside both ranges. Finally, if the FCC does ultimately change its depreciation rates or prescribed ranges, BellSouth or any other party may petition the Authority to revise the UNE rates for these changes.

The Authority finds that in 1993 the TPSC did not set depreciation lives without considering the impact of competition. Additionally, the rates set in the 1993 pre-prescription are forward-looking and there is no merit to BellSouth’s petition for reconsideration as it relates to depreciation factors.

The lives selected by the Authority in its Interim Order are Tennessee-specific and are appropriate for use in setting permanent prices in Tennessee as opposed to those presented by BellSouth which represent an average of BellSouth’s nine (9) state region. In addition, the rates proposed by BellSouth are the rates used for financial reporting purposes and are not

²¹ The NPRM was issued October 14, 1998, well after the hearing on Phase I on this matter was concluded.

appropriate for use in a forward-looking economic cost analysis. The Authority finds that allowing BellSouth to use its proposed depreciation factors, in the absence of robust competition, would result in increased UNE prices which could serve as a barrier to market entry and deny Tennessee consumers the opportunity to have competitive alternatives. The Authority rejects BellSouth's contention that Tenn. Code Ann. § 65-5-209 prohibits the Authority from setting depreciation rates because this statute is not applicable to the establishment of UNE rates.

Upon reconsideration of the evidence in the record the Authority finds that the economic depreciation factors adopted in Phase I of this proceeding are supported by the evidentiary record and finds that modification of its decision on Issue 5 is unnecessary.

Issue 7: How should network maintenance expenses be calculated for determining UNE prices?

BellSouth's TELRIC model uses historic plant specific expenses for calculating the shared and common cost factors and the network maintenance expense factors. These factors, along with numerous other expense factors, are multiplied by the TELRIC investment to arrive at the annual cost of a UNE. BellSouth's model uses 1996 plant specific expenses as the beginning point for calculating the expense factors and then makes normalization adjustments for growth, inflation, workforce reductions and other non-recurring factors to arrive at the final factor. AT&T and ACSI contested these normalization adjustments during the hearing in Phase I of this proceeding.

The Authority's January 25, 1999 Interim Order required all 1996 normalized plant specific expenses used in the model to be reduced by a 22.5%, three (3) year productivity adjustment (7% per year compounded), to more properly reflect the projected maintenance expenses on a going-forward basis.²²

Position of the Parties

BellSouth contends that the evidence does not support applying the 22.5% productivity factor to all plant specific expenses. Further, BellSouth points out that the 7% annual productivity reduction proposed by AT&T witness, Art Lerma, applied to network operations expenses,²³ not to plant specific expenses as ordered by the Authority.

AT&T argues that the Authority's finding on this issue is consistent with the record and should be upheld. AT&T contends that although Lerma's 7% productivity adjustment did

²² TRA Interim Order on Phase I (January 25, 1999), p. 38.

²³ AT&T testified that network operating expenses include accounts 6512, 6531, 6532, 6533, 6534 and 6535.

pertain to network operations expenses, it is reasonable in a forward-looking study to apply the productivity factor to all plant specific expenses. MCI WorldCom makes an argument similar to AT&T, suggesting that “based on the totality of the evidence presented, it is certainly reasonable for the Authority to conclude that BellSouth’s plant specific expenses need to be reduced over time in order to approximate the level that would be incurred by a competitive provider.”²⁴

Findings

The Authority finds that the 7% productivity adjustment is appropriate for use in forward-looking cost models. The 7% productivity adjustment is based on Mr. Lerma’s testimony that network operations expenses have declined by an average of 7% per year between 1989 and 1996. Lerma testified that it is reasonable to conclude that the factors contributing to this decline -- productivity gains due to technology, competition and workforce reductions -- will continue in the future. Lerma testified that with the advent of local telephone competition, this 7% estimate is conservative.

Further, witness Lerma testified that the plant specific expenses in the TELRIC model²⁵ should be adjusted to remove the growth/inflation factor. While these expenses may decline in the future, Lerma provided no convincing evidence to demonstrate that these accounts were actually declining or would be reduced in the future by local telephone competition. The only evidence provided by Mr. Lerma for removing the growth/inflation adjustment was his statement that “competition should drive these expenses downward as new

²⁴ MCI WorldCom Response to BellSouth’s Petition, (February 12, 1999), p. 5.

²⁵ This includes Accounts 6121-6441.

technology is deployed.”²⁶ Lerma provided no trends or analysis of historic plant specific expenses similar to what he prepared for the network operations expenses.

Based upon further review, however, the Authority finds that the 7% annual productivity adjustment proposed by AT&T witness Lerma²⁷ only applies to the network operations expenses, not plant specific expenses. Therefore, the record does not support applying the productivity adjustment to all plant specific accounts.

The Authority finds that the record supports modification of its decision on this issue. Upon reconsideration, the Authority finds that only network operations expense accounts²⁸ in the TELRIC model be reduced by 22.5 percent (22.5%) consistent with Mr. Lerma’s testimony. Therefore, BellSouth’s proposed plant specific expenses in the model should not be adjusted.

²⁶ Lerma Rebuttal Testimony, (October 17, 1997), p. 41.

²⁷ Hearing Transcript Volume XB, p. 173.

²⁸ Network operating expenses include accounts 6512, 6531, 6532, 6533, 6534 and 6535.

Issue 13: Is it necessary to set prices for network element combinations? Should Integrated Digital Loop Carrier (IDLC) be offered to competing carriers?

This issue addresses whether certain combinations of network elements, in addition to individual network elements, should be offered to competitive local exchange carriers and the prices to be established for such combinations. Virtually all of the testimony and cross-examination in the Phase I hearing of the proceeding centered on Integrated Digital Loop Carrier (IDLC), a technology that integrates the loop and the port.

In its Interim Order, the Authority found that CLECs should receive nondiscriminatory access to local loops that are functionally equivalent to loops used by BellSouth to serve its own customers. In light of the Eighth Circuit Court decision that ILECs did not have to combine elements,²⁹ the Authority concluded that existing customers served by IDLC must continue to receive the same level of service and performance when migrating to a competitive carrier. The Authority stated that an unbundled loop of this type should deliver a digital signal to a CLEC that is functionally equivalent to the signal that is delivered to a switch when IDLC is employed. The Authority further stated that no additional digital to analog or analog to digital conversions should occur.

Based on the foregoing, the Authority directed that the cost of this element should be calculated by combining the cost of a loop connected to a switching port, including access to all software features inherent to IDLC technology. The TRA required the cost of this element to be no more than the equivalent of the loop cost associated with an IDLC connection plus reasonable provisioning costs consistent with the 1996 Act.

Subsequent to the Authority's Phase I decision, the United States Supreme Court's

²⁹ *Iowa Utilities Board v. FCC*, 120 F.3d 753 (8th Cir. 1997).

Iowa Utilities decision overturned the Eighth Circuit's opinion concerning Section 251(c)(3). ILECs are now prevented from separating network elements that are already combined before leasing them to a competitor. The Court reasoned that it is improper for ILECs to sabotage network elements that are provided in discrete pieces thereby contemplating that elements may be requested and provided in combined form. The Court found this interpretation of the Act to be entirely rational based on the nondiscriminatory requirements contained in 251(c)(3). The Court stated that this interpretation could allow entrants access to an entire pre-assembled network. Other interpretations could allow incumbents to impose wasteful costs on those carriers requesting less than the whole network.³⁰

Positions of the Parties

BellSouth asserts that the Authority should reconsider or at least clarify its decision concerning the use of Integrated Digital Loop Carrier (IDLC) because: (1) the use of IDLC is incompatible with determining the cost of unbundled loops and ports because unbundled elements should not be provided with technology that is designed to bundle them back together;³¹ (2) the Authority was unclear in its directions to offer an unbundled local loop that will allow end users to obtain the same level of performance as that offered by IDLC; (3) a digital signal at the DS0 level, required by the Authority to be delivered to a CLEC, will not be equivalent to the DS1 digital signal that enters BellSouth's switch when IDLC is employed; (4) the FCC is reforming the list of network elements that an incumbent LEC must unbundle in order to give substance to the requirements of Section 251(d)(2) of the Act, and the Authority cannot apply such standards until developed by the FCC, and (5) the

³⁰ *AT&T Corp. v Iowa Utilities Board*, ___ U.S. ___, 142 L.Ed 2d 835, 119 S. Ct. 721 (1999). See Court's discussion of this issue at 119 S. Ct. 721, at 736-737.

³¹ See Testimony of Wayne Gray, Hearing Transcript, Vol IX D, p. 261.

reinstatement of Rule 51.315(b) does not require the Authority to establish prices assuming the use of IDLC.³²

AT&T agrees that the Authority should reconsider its decision on IDLC because: (1) the United States Supreme Court decision of January 25, 1999 reinstating Rule 51.315(b) and BellSouth's interpretation of its impact on this issue; (2) BellSouth's refusal to provide IDLC to CLECs; and (3) the TRA's enumeration of unbundled elements is permissible under Tennessee law. AT&T disagrees however, with BellSouth's assertion that the Authority's decision is unclear and that the Supreme Court's decision to vacate Rule 51.319 has no impact on the Interim Order.³³

MCI WorldCom also requested the Authority to reconsider its decision regarding IDLC. MCI WorldCom stated that in light of the recent Supreme Court decision the Authority could now directly order BellSouth to provide IDLC facilities in conjunction with the switch and should do so.³⁴

Findings

During the hearing in Phase I, BellSouth based its argument for not offering IDLC to competitors on the Eighth Circuit Court decision that had vacated FCC Rule 51.315(b).³⁵ However, on January 25, 1999, the United States Supreme Court's *Iowa Utilities* decision overturned the Eighth Circuit and reinstated FCC Rule 51.315(b) noting: "In the absence of Rule 315(b), however, incumbents could impose wasteful costs on even those carriers who

³² BellSouth's Petition for Reconsideration and Clarification, (February 4, 1999), pp. 2-19.

³³ AT&T Response to BellSouth's Petition, (February 22, 1999), pp. 21-26.

³⁴ MCI WorldCom Response to BellSouth's Petition, (February 19, 1999), p. 21.

³⁵ FCC Rule 51.315(b) states: "Except upon request, an incumbent LEC shall not separate requested network elements that the incumbent currently combines.

requested less than the whole network. It is well within the bounds of the reasonable for the Commission to opt in favor of ensuring against an anticompetitive practice.”³⁶

IDLC is the integration of the loop and the port. Not requiring BellSouth to offer IDLC to competitors on a per channel basis in serving areas where IDLC is available to BellSouth customers conflicts with the Supreme Court’s decision. If BellSouth is providing IDLC service to its own customers in a particular area, it shall be required to provide this same IDLC to competitors to avoid giving itself preferential treatment over its competitors. BellSouth contends that the TRA does not currently have the jurisdiction to order combinations such as IDLC since FCC Rule 51.319 has been vacated.³⁷

The Authority has determined it is best to act on the request for reconsideration and, should the Authority’s decision be in conflict with the revised FCC rules, to entertain petitions from the parties to revisit the Authority’s decision. Upon reconsideration, the Authority finds that BellSouth must offer IDLC to competitors on a per channel basis in central office feeder routes and serving areas where IDLC is available to BellSouth customers.³⁸ Further, cost-based rates for IDLC should be submitted as part of the compliant studies. These rates should be based on the per channel costs of a virtual loop and port being provided over IDLC.³⁹

³⁶ *AT&T Corp. v. Iowa Utilities Board*, 142 L.Ed. 2d 835 (1999), 119 S. Ct. 721, 737.

³⁷ The FCC is seeking comments in Docket 96-98, adopted April 8, 1999, as to whether the states should be given the responsibility for “removing network elements from any national unbundling requirement.”

³⁸ It is not the intent of the Authority to require BellSouth to install IDLC in areas where BellSouth is not planning to use IDLC to serve its own customers.

³⁹ BellSouth argues that because of the integrated nature of IDLC, a loop and a port are not provided separately. That argument will not be addressed since it is not relevant to our findings. For purposes of this order, however, we refer to the UNE being provided over IDLC as a “virtual” loop and port.

Issue 14: What is the proper method to calculate switch costs?

In its Interim Order, the Authority found that the price of the switched port should include all features. The Interim Order also directs BellSouth to use the output from the marginal mode of Switching Cost Information System ("SCIS") in its cost studies; to recalculate switched usage charges with the formula suggested by AT&T witness Catherine Petzinger;⁴⁰ to change the switch vendor discount inputs to the (proprietary) values suggested by Petzinger; to assume a mix of 70.38% IDLC and 29.62% analog line terminations in calculating switch costs; and to calculate the price of a switched port that includes "all features with no additional charges, specifically no 'glue' charges."⁴¹

This issue will be addressed in four subparts: 1) Marginal mode of SCIS; 2) Getting Started Investment (GSI) recovery; 3) Switch vendor discounts and 4) Vertical features.

Positions of the Parties

1. Marginal Mode of SCIS

BellSouth states that the Authority should reconsider its decision that requires BellSouth to calculate switching costs based on the output of the marginal mode of SCIS as proposed by AT&T witness Petzinger.⁴² According to BellSouth, "there is simply no sound economic or evidentiary basis for calculating switching costs based on marginal costs, as the Authority has concluded."⁴³

BellSouth contends that by ordering that the marginal mode of SCIS be used to

⁴⁰ Petzinger's proposed formula for the switch usage charge (per minute of use) is:

$$\frac{\text{total switch investment} - \text{nontraffic sensitive costs} - \text{getting started investment}}{\text{minutes equivalent of busy hours CCS}}$$

⁴¹ TRA Interim Order on Phase I (January 25, 1999), pp. 25-26.

⁴² BellSouth Petition for Reconsideration and Clarification, (February 4, 1999), p. 7.

⁴³ BellSouth Petition for Reconsideration and Clarification, (February 4, 1999), p. 9, footnote omitted.

calculate switching costs, the Authority “erroneously concluded that switching costs should be based on the next unit of demand which, according to the Authority, ‘is appropriately consistent with TELRIC methodology.’”⁴⁴

According to BellSouth witness David Garfield, the average cost methodology used by SCIS ensures total cost recovery of the switch over “the demand that’s on it.”⁴⁵ Meanwhile, according to Garfield, the marginal cost methodology used by SCIS is

designed to determine the cost of the next unit of demand for different types of demand. How much does the next millisecond of processor time cost? How much does the next line on the switch cost? How much does the next trunk on the switch cost? And so forth.⁴⁶

MCI WorldCom contends that the marginal mode of SCIS does not calculate “marginal cost” as the term is used in economic theory. According to MCI WorldCom, the difference between the marginal mode and the average mode of SCIS is that the marginal mode does not allocate the getting started investment (“GSI”) to individual units of demand. Instead, MCI WorldCom claims the marginal mode of SCIS produces the “long run average cost of the elements,” as described by AT&T witness Randy Beard in the testimony cited by BellSouth in its petition. MCI WorldCom states that the marginal mode of SCIS produces cost estimates consistent with the methodology adopted by the Authority and the FCC.⁴⁷

AT&T points out that Petzinger testified that it was improper to run SCIS in the average mode, *not* because of the differences in the marginal and average cost concepts used in economic theory, but because of the manner in which SCIS assigns GSI when it is run in the average mode. Moreover, AT&T claims the average and marginal mode SCIS

⁴⁴ BellSouth Petition for Reconsideration and Clarification, (February 4, 1999), p. 8, citing Interim Order at 24.

⁴⁵ BellSouth Petition for Reconsideration and Clarification, (February 4, 1999), p. 8.

⁴⁶ BellSouth Petition for Reconsideration and Clarification, (February 4, 1999), p. 8.

⁴⁷ MCI WorldCom Response to BellSouth Petition, (February 19, 1999), pp. 6-7.

calculations are essentially the same but for the treatment of GSI. If inputs concerning utilization assume that the switch is not expected to exhaust, the marginal mode treats GSI as a fixed investment.⁴⁸

In response to AT&T and MCI WorldCom, BellSouth argues that, in unrefuted testimony, witness Garfield stated that the marginal mode of SCIS produces the cost of the next unit of demand for different types of demand. Further ACSI's economic witness Kahn testified that the cost involving the next unit of demand is "marginal cost." Thus, BellSouth contends that the marginal mode of SCIS calculates "marginal costs."⁴⁹

2. GSI Recovery

BellSouth asks the Authority to clarify how to account for the recovery of GSI using the marginal mode of SCIS. According to BellSouth, the marginal mode of SCIS sets the getting started investment to zero for central offices that are going to be replaced prior to exhaust. Also, "if BellSouth were to run the marginal mode of SCIS, the getting started cost would be *almost* excluded from any of the outputs, including the cost of the port."⁵⁰

BellSouth argues that growth should be taken into account in switching cost calculations. According to BellSouth, the economic testimony in the record supports the argument that costs associated with growth must be taken into account in any TELRIC study. BellSouth points out that economic witnesses for BellSouth and AT&T testified that costs associated with growth are properly taken into account by the TELRIC methodology.⁵¹

⁴⁸ AT&T Response to BellSouth Petition, (February 22, 1999), p. 13.

⁴⁹ BellSouth Reply Memorandum, (March 1, 1999), pp. 8-9.

⁵⁰ BellSouth Petition for Reconsideration and Clarification, (February 4, 1999), p. 9, footnote 3, (emphasis supplied).

⁵¹ Id. pp. 9-10.

AT&T notes that BellSouth agrees that switching cost estimates “must reflect the total investment required to serve total current demand.” AT&T argues that this principle, along with the assumption that only the location of existing wire centers remains fixed in TELRIC methodology, dictate that switching costs associated with network growth should be switch placement costs instead of the costs of add-on lines.⁵² According to AT&T, “[t]he proper TELRIC approach is to assume the purchase, on a forward-looking basis, of switches to serve current demand.” AT&T argues that BellSouth’s approach – to serve current demand through initial placement of switches plus add-on investment for growth – embodies an embedded cost approach that is prohibited under TELRIC methodology. AT&T also claims that BellSouth’s focus on growth costs in switching is inconsistent with BellSouth’s arguments concerning cost reductions from growth in other network components like outside plant.⁵³

3. Switch Vendor Discounts

BellSouth states that the Authority should reconsider its decision adopting the vendor discounts proposed by AT&T witness Petzinger. BellSouth states that these discounts only apply to the initial placement of a switch and do not take into account any costs associated with the growth of a switch. BellSouth notes that Petzinger testified that vendor discounts are smaller for additional lines placed on an existing switch.⁵⁴

BellSouth acknowledges that it used a weighted average to reflect the costs of both the initial placement and the growth of its switches in the vendor discount inputs used in its proposed cost estimates. According to BellSouth, this approach is consistent with the

⁵² AT&T Response to BellSouth Petition, (February 22, 1999), p. 14.

⁵³ AT&T Response to BellSouth Petition, (February 22, 1999), pp. 14-15.

⁵⁴ BellSouth Petition for Reconsideration and Clarification, (February 4, 1999), p. 9.

TELRIC methodology advocated by AT&T witness Beard, but not consistent with the vendor discounts adopted by the Authority.⁵⁵

Further, BellSouth contends that neither AT&T nor MCI WorldCom disputes that the vendor discounts adopted by the Authority only reflect the initial placement of the switch and do not take into account any costs associated with the growth of the switch. BellSouth also states that these parties do not dispute that these discounts are inapplicable if the costs of growing a switch influence the economic cost of switching. BellSouth contends that, as AT&T witness Beard testified, TELRIC methodology takes into account growth costs. Thus, the Authority should not adopt vendor discounts that ignore growth costs, such as those proposed by Petzinger.⁵⁶

AT&T claims that the Authority's decision concerning switch vendor discounts is supported by the record in this proceeding. As AT&T notes, BellSouth does not dispute that Petzinger derived her proposed discount values from her review of BellSouth's actual vendor discounts.⁵⁷

MCI WorldCom states that the Authority's decision regarding switch vendor discounts is fully consistent with the Authority's decision concerning fill factors and that both decisions recognize that cost studies should assume BellSouth "will face the same opportunities and consequences that a competitive company would face when deploying switching capacity."⁵⁸

⁵⁵ BellSouth Reply Memorandum, (March 1, 1999), p. 9, footnote 4.

⁵⁶ BellSouth Reply Memorandum, (March 1, 1999), p. 9.

⁵⁷ AT&T Response to BellSouth Petition, (February 22, 1999), pp. 13-14.

⁵⁸ MCI WorldCom Response to BellSouth Petition, (February 19, 1999), p. 7.

4. Vertical Features

BellSouth asks the Authority to reconsider its decision that “the price of the switched port should include all features with no additional charges.”⁵⁹ BellSouth questions the implication of the decision that vertical features do not increase the cost of the port. Without citing specific testimony, BellSouth states that the record established that many vertical features require specialized hardware, the payment of right-to-use fees and administrative provisioning time. Further, BellSouth states that customers using the vertical features should bear the additional costs associated with vertical features. Thus, BellSouth argues that the price established by the Authority for a port with all the features that are actually available in the switch should be higher than the price for a port without vertical features.⁶⁰

AT&T does not deny that additional switch equipment may be required for certain vertical features. Without citing to the record, AT&T asserts that AT&T witness Petzinger clarified that special equipment was “already included in the general prices for switches in BellSouth’s vendor contracts and in the cost that SCIS produced in BellSouth’s cost studies.”⁶¹ Thus, to add such costs in the form of additional vertical feature costs would allow double recovery of costs associated with some vertical features.⁶²

In rebutting AT&T’s assertion that BellSouth’s cost study captures the additional switch costs associated with certain vertical features, BellSouth states that the record does not contain any evidence that the costs associated with vertical features, such as right-to-use fees and special equipment, were included in BellSouth’s cost estimate for the port. Instead,

⁵⁹ TRA Interim Order on Phase I (January 25, 1999), p. 26.

⁶⁰ BellSouth Petition for Reconsideration and Clarification, (February 4, 1999), p. 11.

⁶¹ AT&T Response to BellSouth Petition, (February 22, 1999), p. 15.

⁶² *Id.* p. 15.

according to BellSouth, its cost model calculates separately the costs associated with the basic switch port from the costs associated with vertical features.⁶³

MCI WorldCom supports the Authority's decision to include vertical feature costs in the cost of a switch line port.⁶⁴ In reply to MCI WorldCom's comments, BellSouth states that it does not object to including vertical feature costs in the cost of a switch line port.⁶⁵

Findings

The Authority adopts the position of AT&T and MCI WorldCom, that the calculation produced by the marginal mode of SCIS is not marginal cost in the strict economic sense. The Authority found that the aspect of the marginal mode of SCIS that assigns GSI to non-traffic sensitive costs of the switching port is consistent with TELRIC methodology. The marginal mode properly assigns costs according to the principle of cost causation. No party challenged Petzinger's testimony that the marginal mode of SCIS assigns GSI in this manner. Because the output produced by the marginal mode of SCIS is appropriate for TELRIC model calculations, no change in the Authority's decision on this issue is warranted.

BellSouth's request for clarification of how to account for GSI using the marginal mode of SCIS appears to apply only to situations where switch replacement is necessary due to the exhaustion of switch processor capacity from network growth. The Authority is persuaded by Petzinger's testimony that the under-utilization of switch processors in Tennessee renders it unlikely that they will be replaced because of exhaustion.⁶⁶ Therefore, BellSouth has the information needed to determine GSI recovery.

⁶³ BellSouth Reply Memorandum, (March 1, 1999), pp. 9-10.

⁶⁴ MCI WorldCom Response to BellSouth Petition, (February 19, 1999), p. 7.

⁶⁵ BellSouth Reply Memorandum, (March 1, 1999), p. 10.

⁶⁶ See, Petzinger Rebuttal Testimony at pp. 28-29.

BellSouth also asks the Authority to reconsider its decision to use the vendor discounts proposed by Petzinger because these discounts do not take into account any costs associated with the growth of a switch. The Authority agrees with AT&T's argument that BellSouth's approach – to serve current demand through initial placement of switches plus add-on investment for growth – embodies an embedded cost approach that is inconsistent with TELRIC methodology. The Authority also agrees with the essence of MCI WorldCom's argument that, in a forward-looking competitive environment, BellSouth must bear the risk from accommodating network growth through either the advance purchase of additional network capacity or the deployment of additional capacity over time. For these reasons, the Authority declines to modify its decision on this issue of vendor discount.

The Authority Interim Order states that "...the forward-looking cost of a switching port with all vertical features should be calculated,"⁶⁷ and that "[b]ased on the record, the Authority finds that the price of the switched port should include all features."⁶⁸ The Interim Order also states, "...the price of the switched port should include all features with no additional charges, specifically no 'glue' charges."⁶⁹ The purpose of this last statement was not, as BellSouth contends, to prohibit the appropriate inclusion of feature-specific costs such as the costs of specialized hardware, right-to-use fees and administrative provisioning time. Instead, this statement prohibits BellSouth from including any costs not directly related to the provision of switch features, such as glue charges, in its revised estimates of a switch port that includes all features.

⁶⁷ TRA Interim Order on Phase I (January 25, 1999), p. 24.

⁶⁸ TRA Interim Order on Phase I (January 25, 1999), p. 25.

⁶⁹ TRA Interim Order on Phase I (January 25, 1999), p. 26, footnotes omitted. "Glue charges" are payments for leaving network elements functionally intact or for combining two separate unbundled network elements. See, TRA Interim Order on Phase I (January 25, 1999), p. 26, footnote 31.

To assist the parties in understanding the Authority Interim Order, the following clarification is provided. BellSouth should include feature-specific costs (e.g., the costs of specialized hardware, right-to-use fees, and the cost of administrative provisioning time associated with vertical features) in its TELRIC estimates for a switch port that includes all features. Nonetheless, the Authority stresses that feature-specific costs that are not traffic-sensitive should not be recovered through per minute usage charges.

Issue 16: What is the appropriate level of operational support services (OSS) costs to be included in permanent prices; and

Issue 17(b): What amount of OSS costs should be recovered in non-recurring prices?

The Authority found that the recovery of OSS costs as a non-recurring rate could potentially be a barrier to market entry by telecommunications providers. Additionally, all carriers' customers, both ILECs and CLECs, receive the benefit of OSS and should bear a portion of those costs. Therefore, the Authority directed the parties to remove OSS costs from the non-recurring rates. The Authority also directed the parties to capitalize all OSS costs and recover these costs in a recurring rate per loop spread over the life of the OSS using the appropriate depreciation lives adopted in Issue 5.

Position of the Parties

BellSouth requests that the TRA reconsider its decision specifying the recovery of OSS costs from ILECs and CLECs. BellSouth believes there is no substantial evidence in the record to support the contention that the customers of all carriers, both ILEC and CLEC, receive the benefit of OSS. BellSouth claims that "the OSS costs at issue pertain only to the expenses associated with electronic interfaces that were developed [by BellSouth to be used by CLECs]."⁷⁰ BellSouth also states that if OSS is considered an unbundled element, as the FCC previously found, then the rate must be cost-based, nondiscriminatory and may include a reasonable profit. Additionally, BellSouth contends that the TRA should clarify how the recurring rate is to be developed (e.g. forecasted unbundled loops, forecasted resold lines, etc.).

In its reply comments, BellSouth maintains there is no law or evidence to support the

⁷⁰ BellSouth Petition for Reconsideration and Clarification, (February 4, 1999), p. 14.

decision that the customers of all carriers pay for OSS. BellSouth states there is nothing to support the TRA's finding that the customers of all carriers benefit from the electronic interfaces developed solely for use by CLECs. Additionally, BellSouth claims there is no statutory mandate that would create an exception to the principle that the cost causer should pay for the costs that he or she generates. "Consistent with general principles of cost causation, BellSouth believes that CLECs, and not itself, should pay these OSS costs."⁷¹

MCI WorldCom states that due to innovative competitive choices, "BellSouth will have to offer better value in order to compete."⁷² MCI maintains that as customers are spread between carriers, BellSouth will need some of the same OSS functions that CLECs need today.

In its response to BellSouth's petition, ACSI stated that an up-front OSS charge by BellSouth is an anti-competitive charge as set forth by Dr. Kahn. BellSouth asserts that OSS costs are for electronic interfaces, which benefit only CLECs. ACSI counters by stating that Federal law does not require BellSouth to build duplicative electronic interfaces for the use of BellSouth's competitors and that BellSouth could have allowed CLECs to use existing OSS systems. BellSouth argues that CLECs should pay for these redundant systems that, according to ACSI, do not work as well as BellSouth's systems. Dr. Kahn's testimony supports a cost study that allocates demand among all anticipated users, both ILEC and CLEC.⁷³

AT&T responded that investment in electronic interfaces provide long term consumer benefit and should be recovered over time. AT&T also maintains that the TRA should clarify its decision that OSS costs are to be recovered in a recurring additive to the loop rate in 17(b).

⁷¹ BellSouth Reply Memorandum, (March 1, 1999), p. 14.

⁷² MCI WorldCom Response to BellSouth Petition, (February 19, 1999), p. 10.

⁷³ ACSI Response to BellSouth's Petition, (February 19, 1999), pp. 3-4.

AT&T believes the cost recovery decision of the TRA is inconsistent with the purpose of OSS which is to order all UNEs. AT&T requests the TRA to clarify its decision by stating that the recovery of OSS costs be allocated to the recurring rates for all UNEs.⁷⁴

Findings

During Phase I of this proceeding, BellSouth maintained that the costs of OSS included electronic interfaces (development expenses, hardware equipment, maintenance expenses associated with new systems and program enhancements to four (4) Legacy Systems). These systems were developed to assist in the ordering of UNEs by carriers and, as BellSouth points out, the costs should be recovered from those carriers receiving the assistance.

The directive of the Authority, as reflected in the Interim Order, states that all carriers (ILEC, CLEC, etc.) should pay a recurring rate to recover OSS costs. The TRA's Order is clarified to state that OSS interface costs should be recovered from all users of the new systems, whether ILECs or CLECs. The cost of OSS in this proceeding includes program enhancement to the four Legacy Systems and development expense, hardware equipment and maintenance expenses associated with the new systems.

As pointed out during the hearing, the electronic interfaces and enhancements to the Legacy Systems were developed to allow carriers to order UNEs. AT&T is correct in its assertion that the purpose of OSS is to order all UNEs. For this reason, the Authority clarifies that each UNE should recover a portion of the OSS costs through recurring rates.

⁷⁴ AT&T Response to BellSouth Petition, (February 22, 1999), p. 16.

Issue 17 (c): Which work activities should be included in developing non-recurring prices?

There are numerous manual work functions that occur when a CLEC order falls out. BellSouth applies labor rates to the work times required for these manual functions in determining a portion of non-recurring costs. The Authority ordered that all work activities associated with fallout should be based on a 7% fallout rate. Further, the Authority ordered BellSouth to modify its cost model to reflect three (3) minutes of work activity per order at the Local Customer Service Center (LCSC) when an order falls out.

Position of the Parties

BellSouth requests the Authority to clarify its decision regarding the appropriate amount of manual work time required when an order falls out. BellSouth states that if it uses a 7% fallout rate with three (3) minutes of work time at the LCSC in its model, the average work time per order is calculated to be slightly more than one (1) minute. BellSouth contends that this one-minute calculation is inconsistent with the three (3) minutes of work time ordered by the TRA.⁷⁵ In its reply comments BellSouth specifically inquires whether the Authority intended for BellSouth to use three (3) minutes of work activity in its model when an order falls out, or whether the Authority intended for the three (3) minutes of work activity to be used in calculating an average work time.⁷⁶

MCI WorldCom states that the Authority's directive is clear and that BellSouth is to base its cost model on three (3) minutes of work time to resolve a fallout situation, which is likely to occur 7% of the time. MCI contends the average work time for an order that falls out is 12.6 seconds (180 seconds \times 7%).⁷⁷

⁷⁵ BellSouth Petition for Reconsideration and Clarification, (February 4, 1999), p. 15.

⁷⁶ BellSouth Reply Memorandum, (March 1, 1999), p. 14.

⁷⁷ MCI Response to BellSouth Petition, (February 19, 1999), p. 11.

AT&T states that the 7% fallout rate is well supported in the record. AT&T also contends that the Authority's decision of three (3) minutes of work time per order "ensures that BellSouth will not double recover its non-recurring costs."⁷⁸

Findings

The three (3) minutes per order included in the Authority's Interim Order was based on a calculation using the 20% fallout rate proposed by BellSouth multiplied by fifteen (15) minutes of work activity ($20\% \times 15 \text{ minutes} = 3 \text{ minutes of work time required}$). BellSouth proposed that fifteen (15) minutes of work activity would be required when an order must be manually processed. Based on the record, the Authority maintains this amount of time to be adequate. Therefore, BellSouth should adjust its cost model to reflect fifteen (15) minutes of work time to resolve a fallout situation that will occur 7% of the time. This will result in an average work time per order of sixty-three (63) seconds [$15 \text{ minutes (900 seconds)} \times 7\%$].

⁷⁸ AT&T Response to BellSouth Petition, (February 22, 1999), p. 18.

Issue 18: What is the appropriate level of disconnect costs to be included in the non-recurring price (given the existence of a soft dial tone environment)?

“Soft dial tone” is the term used to describe the service that is left in place to allow customers to dial 911 or connect to the ILEC for establishing service. In order to determine appropriate non-recurring prices, the Authority had to determine the level of disconnect costs to include where a soft dial tone exists.

The Authority’s Interim Order directed that in a soft dial tone environment, where service is left in place, there should be no disconnection costs for physically disconnecting an access line. The Authority determined that BellSouth’s cost model should be adjusted to remove the costs associated with physically disconnecting a customer in a soft dial tone environment.

Position of the Parties

BellSouth requests the Authority to clarify what disconnect costs should be removed in a soft dial tone environment. BellSouth states that in a situation where physical disconnection actually occurs, no party points to any evidence in the record to suggest that BellSouth can issue a software command without physical disconnection of any sort.

MCI WorldCom contends that the Authority’s decision regarding soft dial tone environment “will be applicable in many situations and should be applied.”⁷⁹ AT&T states that it understands the Authority’s decision as prohibiting “BellSouth from assessing any disconnection costs when a CLEC has purchased a UNE combination to serve a customer and then subsequently loses that customer to another CLEC.”⁸⁰

⁷⁹ MCI WorldCom Response to BellSouth Petition, (February 19, 1999), p. 12.

⁸⁰ AT&T Response to BellSouth Petition, (February 22, 1999), p. 18.

Findings

The Authority previously ordered that, in instances where BellSouth does not have to physically disconnect a line at the time service is terminated (by the parties' definition, this occurs in a soft dial tone environment), BellSouth should not include any costs for physical disconnection. The Authority's Interim Order did not intend that there would be no cost for disconnection in these instances but rather it meant that the portion of costs associated with physically disconnecting a line in a soft dial tone environment should be excluded.

The Authority is now being requested to clarify the disconnect costs to be removed in a soft dial tone environment. The Authority's Interim Order did not attempt to identify the specific disconnection costs to be included or excluded. Instead, the Authority was simply stating that if BellSouth did not incur any physical disconnection costs in a soft dial tone environment (as AT&T and MCI WorldCom contend), BellSouth should not recover such costs. The Authority does not change its decision as stated in the Interim Order of January 25, 1999. Nonetheless, to assist the parties in carrying out this order, the following clarification is provided: BellSouth should provide a separate disconnection rate in instances where there are no physical disconnection costs incurred. Further, the Authority's Interim Order does not prohibit BellSouth from recovering physical disconnection costs when incurred.

Issue 19: What approach should be adopted for calculating prices for physical collocation? What inputs, if any, should be adjusted?

Issue No. 19 relates to the approach that regulators take in establishing rates for BellSouth to charge competitors to collocate equipment in BellSouth's central offices in order to interconnect their networks for exchange of conversations, data, etc. AT&T and MCI WorldCom have developed a model that bases rates on the costs of a modern efficient building designed on a best practices approach for collocating BellSouth and CLEC equipment. This model follows the FCC's approach of estimating the forward-looking costs of a new theoretical network with only the locations of the present central offices being fixed. AT&T and MCI WorldCom take the position that CLECs should not be saddled with old building rehabilitation costs such as new HVAC systems, ADA requirements, wall demolition, asbestos removal, etc. No party presented a proposal for cageless collocation.

In Phase I of this proceeding, the Authority adopted the AT&T and MCI collocation approach for calculating the rates for physical collocation. Further, the AT&T and MCI collocation model should be adjusted to increase the width of the common area space in accordance with the Standard State Building Code.

Position of the Parties

BellSouth asks the Authority to reconsider its decision to adopt the AT&T and MCI collocation model for calculating physical collocation rates. BellSouth calls the model nothing more than a "fanciful" attempt by AT&T and MCI to artificially reduce the costs of physical collocation, which it says has not been accepted by a single state commission in BellSouth's region. BellSouth also contends that the model is inconsistent with the 1996 Act because it is premised on the assumption that BellSouth offices were designed to minimize CLEC collocation costs. BellSouth also states that the Authority has expressly recognized

that the 1996 Act “[o]n its face... clearly conveys that interconnection and network element rates shall be determined by the actual cost of providing service to a new entrant, using the network that the incumbent actually owns.”⁸¹

In its reply, BellSouth states that the Intervenors make no attempt to reconcile the TRA’s decision with the Authority’s view that rates should “...be determined by the actual cost of providing service to a new entrant, using the network that the incumbent actually owns.”⁸² Further, BellSouth maintains that the model makes no attempt to determine BellSouth’s actual cost of providing collocation. BellSouth challenges AT&T’s position that FCC pricing rules require that prices be set using forward-looking long run economic cost. BellSouth states that even though the Supreme Court reversed the Eighth Circuit Court’s decision that the FCC lacked jurisdiction to adopt its rules, the Eighth Circuit has not lifted its mandate and has received a motion by a number of LECs to withhold issuance of the mandate pending a decision on the merits of the rules.⁸³

MCI WorldCom states that the use of the collocation model will limit BellSouth’s ability to attempt to artificially inflate the prices for collocation. MCI WorldCom also argues that BellSouth’s costs are based on the construction of “collocation condos” that vastly exceed the requirements of either BellSouth or CLECs and that this encourages BellSouth to utilize space available inefficiently in its central offices. Further, MCI WorldCom states that BellSouth’s argument against the use of the model “is based upon a hypothetical space that does not reflect the specific space, design, or layout of any BellSouth central offices in

⁸¹ BellSouth Petition for Reconsideration and Clarification, (February 4, 1999), pp. 11-12.

⁸² BellSouth Reply Memorandum, (March 1, 1999), p. 10, quoting from Brief of Tennessee Regulatory Authority, {*BellSouth Telecommunications, Inc. v. Tennessee Regulatory Authority et al.*} Nos. 3-97-0523 & 3-97-0616 (U. S. District Court), at 19 (appeal of the BellSouth/AT&T and BellSouth/MCI arbitration decisions).

⁸³ BellSouth Reply Memorandum, (March 1, 1999), pp. 10-11.

Tennessee” and is irrelevant in the context of the calculation of forward-looking costs.⁸⁴ MCI WorldCom argues that BellSouth’s TELRIC Calculator produces loop costs that reflect a statewide average of a hypothetical loop and do not represent a specific location, design, or layout of any BellSouth local loop in Tennessee. MCI WorldCom argues that, if BellSouth is correct in its assertion that basing prices on the results of the AT&T/MCI collocation model is “contrary to clear congressional intent,” then BellSouth must concede that its TELRIC Calculator is likewise unfit for use.⁸⁵

AT&T responds to BellSouth’s petition stating that BellSouth is simply rearguing its position in the case and has identified no instance in which the Authority’s Interim Order on this issue is contrary to the record or the law. Further, AT&T asserts that this is another instance where the TRA found evidence presented by AT&T and MCI more persuasive than the evidence presented by BellSouth. AT&T states that the developers of the collocation model constructed a forward-looking model central office based on efficient space planning and identified all necessary components of collocation investment, including engineering, furnish and installation costs. AT&T asserts that the model calculates recurring costs using the same techniques that the Hatfield Model employs in the calculation of recurring costs for unbundled network elements.⁸⁶

AT&T maintains that the AT&T/MCI collocation model is not inconsistent with the 1996 Act and is the sort of model required under the Act as implemented by the FCC’s pricing regulations. According to AT&T, the FCC’s pricing regulations are absolutely clear that “collocation should be subject to the same pricing rules [as other unbundled elements]” and

⁸⁴ MCI WorldCom Response to BellSouth Petition, (February 19, 1999), pp. 8-9.

⁸⁵ MCI WorldCom Response to BellSouth Petition, (February 19, 1999), pp. 8-9.

⁸⁶ AT&T Response to BellSouth Petition, (February 22, 1999), pp. 18-19.

that its pricing rules require that prices be set at forward-looking long run economic cost. The FCC has made clear that this standard is "...intended to consider the costs that a carrier would incur in the future" and "...has clarified that this standard presumes the current location of wire centers, but requires a 'reconstructed' local network to connect current wire center locations to serve demand." AT&T concludes that "...the TRA's Interim Order on this subject is amply supported by the record, it is absolutely required by the FCC's pricing regulations."⁸⁷

BellSouth maintains that even if the Court issued its mandate reinstating its rules, the FCC has indicated that it intends to revisit those rules. BellSouth supports its position by attaching the motion of the LECs and press releases regarding likely FCC action.⁸⁸

Findings

The TRA has been charged in two separate dockets to set UNE prices. In the BellSouth/AT&T arbitration (Docket Nos. 96-01152 and 96-01271), the TRA established interim rates for non-recurring services based on the evidence presented in the arbitration docket. The interim rates were to be utilized until the TRA reviewed the cost study methodologies of the parties and set permanent rates. Further, the BellSouth/MCI Interconnection Agreement provides that the rates are interim and subject to "true up."

The TRA has received cost study evidence on the subject of collocation rates in this docket and has adopted rates based on the proposed forward-looking efficient costs utilized by the AT&T/MCI Collocation Model which conform to the FCC pricing rules. The Authority's decision was soundly based on the evidentiary record in this docket, and therefore, no clarification or modification of the decision on this issue is required.⁸⁹

⁸⁷ AT&T Response to BellSouth Petition, (February 22, 1999), pp. 18-20.

⁸⁸ BellSouth Reply Memorandum, (March 1, 1999), pp 1-6.

⁸⁹ The decision of this Authority addresses rates for caged collocation as proposed by the parties. Alternatives to caged collocation are not addressed in this proceeding.

Based upon the foregoing findings and conclusions:

IT IS THEREFORE ORDERED THAT:

1. Upon reconsideration, BellSouth's TELRIC Calculator model shall use a distribution fill of 50.2%, fiber feeder fill of 74.0%, and copper feeder fill of 65.1% as originally recommended by BellSouth. The factors proposed by AT&T are appropriate for use in the Hatfield model.
2. To maintain consistency between model inputs, the Authority has reconsidered, on its own motion, Issue 12 (loop weightings) and, upon further review of the record, has determined that BellSouth shall use weights of 62.89% residential and 37.11% business in the residential/business weighting tables of its loop model. Further, the Hatfield model should also reflect a 62.89% residential loop and 37.11% business loop input.
3. In as much as the depreciation factors adopted in Phase I are based upon sound evidentiary facts, the Authority declines to modify its decision in Phase I as to what depreciation rates should be used in determining permanent prices.
4. Upon reconsideration, only BellSouth's normalized 1996 network operating expense accounts shall be reduced by 22.5% for calculating the maintenance expense to be included in the UNE costs in all models. This includes USOA accounts 6512 and 6531 through 6535.
5. Upon reconsideration, BellSouth must offer IDLC to competitors on a per channel basis in central office feeder routes and serving areas where IDLC is available to BellSouth customers. Cost-based rates for IDLC should be submitted as part of the compliant cost studies and these rates should be based on the per channel cost of a "virtual" loop and port being provided over IDLC.

6. Based upon a determination that BellSouth has the information needed to determine the Getting Started Investment (GSI), the Authority does not modify its decision requiring BellSouth to calculate switching costs based on the output of the marginal mode of the switching cost information system. The Authority also declines to modify or alter its decision on switch vendor discounts.

7. At the request of the parties, the Authority clarifies its Interim Order regarding vertical features such that BellSouth should include feature-specific costs (e.g. the costs of specialized hardware, right-to-use fees, and the costs of administrative provisioning time associated with vertical features) in its TELRIC estimates for a switch port that includes all features and BellSouth shall not recover non-traffic sensitive feature-specific costs through per minute usage charges.

8. Upon reconsideration, Operation Support Services (OSS) costs to BellSouth shall be recovered from all users of the OSS systems whether by ILEC or CLEC or by BellSouth itself, through an additive to the recurring rate for all UNEs. The costs of OSS consist of electronic interface, development expenses, hardware equipment, maintenance expenses associated with new systems and program enhancements to four Legacy Systems. Additionally, OSS costs should be recovered through an additive to each UNE recurring rate.


9. Upon clarification of its Interim Order regarding non-recurring prices. BellSouth shall adjust its TELRIC model to reflect fifteen (15) minutes of work time to resolve a fallout situation that will occur 7% of the time. This adjustment results in an average work time per order of sixty-three (63) seconds.

10. The Authority's Interim Order requiring that BellSouth shall not charge CLECs for any cost associated with physical disconnection in a soft dial tone environment where

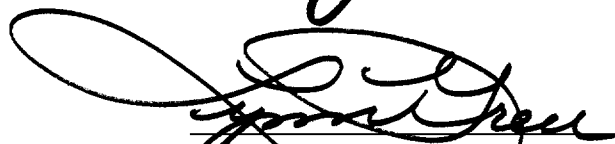
BellSouth does not physically disconnect the service is clarified to require BellSouth to develop two separate disconnect rates: 1) where BellSouth incurs physical disconnection costs and 2) where a soft dial tone environment exists and no physical disconnection costs are incurred by BellSouth.

11. No modification of the Authority's Interim Order on calculating prices for physical collocation is warranted.

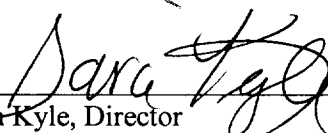
12. The parties shall file cost studies to reflect these findings within fourteen (14) days of the date of this Order.



Melvin J. Malone, Chairman




K. Lynn Greer, Jr., Director



Sara Kyle, Director

ATTEST:



K. David Waddell, Executive Secretary